



Metric Title: Bug Turnaround

Metric Definition: May refer to logical concepts in the relevant database eg., Status transitions in BugTracker

Two metrics:

1. Chart the median age of all open bugs at the end of each week for all Packages, one line per Priority
2. Chart the median open-closed lifetime of all bugs closed in the last 3 months (plotted weekly), one line per Priority

Interactively, users can specify a subset of all Packages to chart

With manual intervention (use of excel), could display 'all' plus 'best 5' and 'worst 5' Packages



A short summary on the proposed solution :

Description of the tools used, reference to relevant languages, required scope for modifying @runtime, eg., to be able to filter on package / product

BugzillaMetrics on SF website will provide two standard reports:

- Median age of open bugs
- Median closure time for bugs



Dependencies:

Details of any dependencies like infrastructure needed, access permissions to be provided etc.,

BugzillaMetrics

No special permissions are needed

May need logical groupings of Packages into ~15 clusters to be maintained

Proposed Implementation:

Draft version of source code, sql queries or scripts etc., may be attached



[Work in Progress]



Discussion

- ❑ Two metrics are needed because either metric in isolation can drive unwanted behavior:
- ❑ Median Age of Open Bugs does not show actual full open lifetimes (ie closure cycle time)
 - ❑ when bugs are closed (=resolved, verified or closed), they disappear from the calculation – this means it will encourage resolving oldest bugs first, as fixing young bugs pushes up the median
- ❑ Median Closure Time for Bugs shows actual lifetimes, but only for bugs that got closed
 - ❑ Excluding bugs that remain open encourages leaving very old bugs open
- ❑ Providing both metrics presents both historical achievement and current performance on bug backlog



Open issues (1)

- ❑ It may be possible to draw a chart that shows median and upper and lower quartile ages on the same chart – this is under study
- ❑ 100 packages means we can't show all packages on one graph.
 - ❑ With manual intervention, we could have a monthly chart showing All, and just best five and worst five Packages ('name and shame' approach).
 - ❑ BugzillaMetrics allows interactive specification of a set of Packages of interest (not specifying any gives all)
 - ❑ If packages can be logically grouped into around 15 clusters, these could be all shown individually on the default chart.
- ❑ Priorities – Default chart shows 5 lines: All for each priority.



Open issues (2)

- ❑ What to do if there are no open bugs in a Package at a priority? Or none closed in the past 3 months?
- ❑ What about enhancements vs defects? Should all closures (ie Fixed and Non-fixed) be included?
- ❑ What end states count as 'closed'? (Verified and Closed, or Resolved, too?)

